

## PATENT COOPERATION TREATY

**PCT**

REC'D 19 AUG 2004

PCT

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

## (PCT Article 36 and Rule 70)

Applicant's or agent's file reference 010306WO	FOR FURTHER ACTION      See Notification of Transmittal of International Preliminary Examination Report (Form PCT/IPEA/416)	
International application No. PCT/US02/34332	International filing date (day/month/year) 25 October 2002 (25.10.2002)	Priority date (day/month/year) 25 October 2001 (25.10.2001)
International Patent Classification (IPC) or national classification and IPC IPC(7): H04B 7/26 and US Cl.: 455/15, 16		
Applicant QUALCOMM INCORPORATED		

1. This international preliminary examination report has been prepared by this International Preliminary Examining Authority and is transmitted to the applicant according to Article 36.

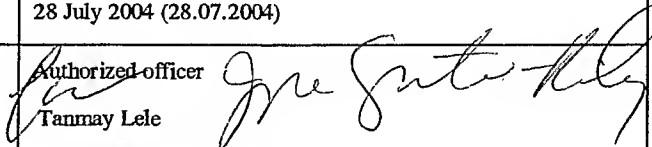
2. This REPORT consists of a total of 6 sheets, including this cover sheet.

This report is also accompanied by ANNEXES, i.e., sheets of the description, claims and/or drawings which have been amended and are the basis for this report and/or sheets containing rectifications made before this Authority (see Rule 70.16 and Section 607 of the Administrative Instructions under the PCT).

These annexes consist of a total of \_\_\_ sheets.

3. This report contains indications relating to the following items:

- I  Basis of the report
- II  Priority
- III  Non-establishment of report with regard to novelty, inventive step and industrial applicability
- IV  Lack of unity of invention
- V  Reasoned statement under Article 35(2) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement
- VI  Certain documents cited
- VII  Certain defects in the international application
- VIII  Certain observations on the international application

Date of submission of the demand 23 May 2003 (23.05.2003)	Date of completion of this report 28 July 2004 (28.07.2004)
Name and mailing address of the IPEA/US Mail Stop PCT, Attn: IPEA/US Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450 Facsimile No. (703)305-3230	Authorized officer  Tanmay Lele Telephone No. (703) 305-3462

**I. Basis of the report**

1. With regard to the elements of the international application:\*

the international application as originally filed.

the description:

pages 1-8 \_\_\_\_\_ as originally filed

pages NONE \_\_\_\_\_, filed with the demand

pages NONE \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

the claims:

pages 9-15 \_\_\_\_\_, as originally filed

pages NONE \_\_\_\_\_, as amended (together with any statement) under Article 19

pages NONE \_\_\_\_\_, filed with the demand

pages NONE \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

the drawings:

pages 1-6 \_\_\_\_\_, as originally filed

pages NONE \_\_\_\_\_, filed with the demand

pages NONE \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

the sequence listing part of the description:

pages NONE \_\_\_\_\_, as originally filed

pages NONE \_\_\_\_\_, filed with the demand

pages NONE \_\_\_\_\_, filed with the letter of \_\_\_\_\_.

2. With regard to the language, all the elements marked above were available or furnished to this Authority in the language in which the international application was filed, unless otherwise indicated under this item.

These elements were available or furnished to this Authority in the following language \_\_\_\_\_ which is:

the language of a translation furnished for the purposes of international search (under Rule 23.1(b)).

the language of publication of the international application (under Rule 48.3(b)).

the language of the translation furnished for the purposes of international preliminary examination (under Rules 55.2 and/or 55.3).

3. With regard to any nucleotide and/or amino acid sequence disclosed in the international application, the international preliminary examination was carried out on the basis of the sequence listing:

contained in the international application in printed form.

filed together with the international application in computer readable form.

furnished subsequently to this Authority in written form.

furnished subsequently to this Authority in computer readable form.

The statement that the subsequently furnished written sequence listing does not go beyond the disclosure in the international application as filed has been furnished.

The statement that the information recorded in computer readable form is identical to the written sequence listing has been furnished.

4.  The amendments have resulted in the cancellation of:

the description, pages NONE

the claims, Nos. NONE

the drawings, sheets/fig NONE

5.  This report has been established as if (some of) the amendments had not been made, since they have been considered to go beyond the disclosure as filed, as indicated in the Supplemental Box (Rule 70.2(c)).\*\*

\* Replacement sheets which have been furnished to the receiving Office in response to an invitation under Article 14 are referred to in this report as "originally filed" and are not annexed to this report since they do not contain amendments (Rules 70.16 and 70.17).

\*\* Any replacement sheet containing such amendments must be referred to under item 1 and annexed to this report.

**V. Reasoned statement under Rule 66.2(a)(ii) with regard to novelty, inventive step or industrial applicability; citations and explanations supporting such statement****1. STATEMENT**

Novelty (N)	Claims <u>Please See Continuation Sheet</u>	YES
	Claims <u>Please See Continuation Sheet</u>	NO
Inventive Step (IS)	Claims <u>Please See Continuation Sheet</u>	YES
	Claims <u>Please See Continuation Sheet</u>	NO
Industrial Applicability (IA)	Claims <u>Please See Continuation Sheet</u>	YES
	Claims <u>Please See Continuation Sheet</u>	NO

**2. CITATIONS AND EXPLANATIONS**

Claims 1,11,21,31,32, and 40, lack novelty under PCT Article 33(2) as being anticipated by Wickman (Wickman, US Patent No 5,910,943).

Regarding claims 1,11,21,31,32, and 40, Wickman teaches of a method, apparatus, means, and program storage device of identifying remote communications transmitted via a repeater, comprising the steps of: receiving a signal transmission from a remote station; determining if the signal transmission includes a discriminant applied to the signal transmitted from the remote station; and designating the signal transmission as being transmitted via the repeater if the signal transmission includes the discriminant (abstract and starting column 2, line 64 and ending column 3, line 5).

Claims 2 - 4, 6, 10, 12,13, 15, 16, 20, 22, 23, 26, 30, 33 - 35, 37, 39, 41 - 44, 46, an 48 meet the criteria set out in PCT Article 33(2)-(3) because the prior art does not teach or fairly suggest the use of wherein the discriminant comprises a modulation (PM, FM, or AM) applied to the signal transmission from the remote station, transmission from a plurality of repeaters, and the discriminant is unique to each of the plurality of repeaters, or wherein the discriminant comprises a code.

----- NEW CITATIONS -----

## INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.

PCT/US02/34332

**VI. Certain documents cited****1. Certain published documents (Rule 70.10)**

Application No <u>Patent No.</u>	Publication Date <u>(day/month/year)</u>	Filing Date <u>(day/month/year)</u>	Priority date (valid claim) <u>(day/month/year)</u>
6,501,955	31 December 2002 (31.12.2002)	19 June 2000 (19.06.2000)	None

**2. Non-written disclosures (Rule 70.9)**

<u>Kind of non-written disclosure</u>	Date of non-written disclosure <u>(day/month/year)</u>	Date of written disclosure referring to non-written disclosure <u>(day/month/year)</u>
---------------------------------------	---	--

**VIII. Certain observations on the international application**

The following observations on the clarity of the claims, description, and drawings or on the questions whether the claims are fully supported by the description, are made:

Claims 5, 7-9, 14, 17 - 19, 24, 25, 27 - 29, 36, 38, 45, and 47 are objected to as lacking clarity under PCT Rule 66.2(a)(v) because claims 5, 7-9, 14, 17 - 19, 24, 25, 27 - 29, 36, 38, 45, and 47 are not fully supported by the description. The description does not disclose the claimed invention in a manner sufficiently clear and complete for the claimed invention to be carried out by a person skilled in the art because:

Regarding claims 5, 14, 24, 36, and 45, it was not understood what was meant by the limitation, "delay modulation," as modulation generally refers to varying an electrical parameter of an electromagnetic wave (phase, amplitude, or frequency) to impart information onto that wave. If it was to be assumed that the entire signal was to be delayed (possibly from Figure 6 and page 6 paragraph 0030), note further that for such a concept to be realized, some time reference would be required as delay is arbitrary, dependant upon several factors (for example, the medium of transmission or the multi-paths involved in the radio environment) and thus such a "modulation" would need to be understood ("de-modulated") with respect to some standardized time reference (none was noted in the specification) and hence it was not understood how "delay modulation" could work as specified.

Claim 25 was rejected for at least those reasons least those recited for dependent claim 24.

Regarding claims 7 - 9, 17 - 19, and 27 - 29, the limitation, "amplitude modulation is applied to the signal transmission by performing the step of varying a gain of the amplifier" was not specifically described in the Applicant's specification. Applicant describes the employment of AM modulation (page 6, paragraph 0029 and Figure 5), but this recitation does not describe the claimed. Note further, it was not understood how the description from the specification employed amplitude modulation, as the return link 122B would merely be routed to the load (and then either to ground or reflected, as the load was unspecified as well) as stated.

Regarding claims 38 and 47, the limitation, "amplitude modulation performed at a frequency higher than the closed-loop bandwidth of the power control system," was not specifically described in the Applicant's specification. Applicant describes "the frequencies of the added discriminant is sufficiently attenuated by the closed loop response of the power control system 1002 so that the power command is effectively non-existent or negligible" on pages 7 - 8 (paragraph 0039) but does not detail how amplitude modulation "is performed at a higher frequency" (note that amplitude modulation varies the amplitude of a carrier and hence how AM "is performed at a higher frequency" was not understood or clearly defined in the specification)

INTERNATIONAL PRELIMINARY EXAMINATION REPORT

International application No.  
PCT/US02/34332

**Supplemental Box**

(To be used when the space in any of the preceding boxes is not sufficient)

V.1. Reasoned Statements:

The opinion as to Novelty was positive (Yes) with respect to claims NONE

The opinion as to Novelty was negative (No) with respect to claims 1-4,6,10,11-13,15,16,20,21-23,26,30-35,37,39-34,46,48

The opinion as to Inventive Step was positive (Yes) with respect to claims NONE

The opinion as to Inventive Step was negative (NO) with respect to claims 1-4,6,10,11-13,15,16,20,21-23,26,30-35,37,39-34,46,48

The opinion as to Industrial Applicability was positive (YES) with respect to claims 1-4,6,10,11-13,15,16,20,21-23,26,30-35,37,39-34,46,48

The opinion as to Industrial Applicability was negative (NO) with respect to claims 5,7-9,14,17-19,24,25,27-29,36,38,45,47